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**PATENT ABSTRACTS OF JAPAN**

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**(54) DEHYDROGENATION IN PRODUCTION OF TITANIUM POWDER**

**(57)Abstract:**

**PURPOSE:** To efficiently dehydrogenate titanium hydride in the production of titanium powder by rotating and agitating the titanium hydride charged in a closed rotary kiln instead of a conventional stationary batch-type dehydrogenator wherein trays are placed on one another in multiple stages.

**CONSTITUTION:** A titanium hydride powder 11 is charged into a closed rotary kiln 1 connected with an evacuating pipe 4 and a gaseous Ar feed pipe 6 through a rotary joint 5, the kiln is evacuated and heated, the powder is dehydrogenated while rotating the kiln 1, heating is stopped after the kiln is restored to a specified vacuum, and gaseous Ar is supplied immediately or after a necessary retention time to cool the kiln. The kiln 1 is vibrated continuously or intermittently during dehydrogenation.



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